

Master Document – Audit Program

Activity Code 12500	Material Management and Accounting System (MMAS)
Version 5.14, dated April 2003	
B-1	Planning Considerations
Purpose and Scope	
The major objectives of this audit are to:	
<ul style="list-style-type: none">• Obtain a sufficient understanding of the contractor's MMAS and related internal control (including both manual and computerized activities) to plan related contract audit effort. This requires that the auditor assess the adequacy of the contractor's policies and procedures, whether they have been implemented, and if they are working effectively.	
<ul style="list-style-type: none">• Document the understanding of the MMAS internal control in the working papers and permanent files (see CAM 5-100).	
<ul style="list-style-type: none">• Test the operational effectiveness of MMAS internal controls and evaluate whether the contractor's MMAS adequately conforms to the MMAS standards contained in DFARS 252.242-7004. If the contractor does not have contracts that include DFARS 252.242-7004, this audit can be used to determine if the contractor MMAS meets CAS and FAR requirements, or other requirements.	
<ul style="list-style-type: none">• Assess control risk as a basis to identify factors relevant to the design of substantive tests.	
<ul style="list-style-type: none">• Report on the understanding of the MMAS internal control, and assessment of control risk, and the adequacy of the system for government contracts. Express an opinion on the contractor's level of compliance with the MMAS standards identified in DFARS 252.242-7004. Provide the ACO with a reasonable estimate of the cost impact of any identified deficiencies.	
This audit program is intended for use in evaluating contractor compliance with applicable CAS and FAR requirements, MMAS standards in DFARS 252.242-7004, and other contract requirements.	
Only those controls directly related to the contractor's MMAS, as defined in DFARS 252.242-7004, will be audited under this assignment. Controls for interrelated audit concerns regarding the adequacy of the contractor's other major systems (Budget and Planning, Estimating, Purchasing, etc.) will be audited under separate assignments. While the controls for these areas are not part of this audit, the results of all audits of these interrelated controls must be considered in forming an overall audit conclusion on the MMAS internal control. The results of this audit should be commented on in reports on related audit areas. When performing an update or follow-up examination, the audit steps should be adjusted and tailored accordingly. To the extent possible, prior audit	

Master Document – Audit Program

effort should be used as a basis for validating the contractor's internal control.
Before beginning this examination, the auditor should be alert for internal control evaluations performed by the contractor or its external auditor relating to this audit area. In those cases where internal evaluations have been performed, the auditor should follow the guidance contained in CAM 4-1000, Relying Upon the Work of Others.
Before performing any examination of internal controls, the auditor should determine that the system contemplated for examination or functional area is material to the Government. Once it is determined that the system is material to the Government, the auditor should reassess the materiality of each section in the internal control audit program before performing any audit steps in that section. The scope of any audit depends on individual circumstances. The auditor is expected to exercise professional judgment, considering vulnerability and materiality, in deciding the scope of audit to be performed.
The use of computers of all kinds in a contractor's accounting and management systems is so pervasive it is unlikely any audit of them could be performed adequately without an examination of the internal controls over their automated aspects. Therefore, the auditor should become familiar with guidance contained in the Information System (IS) Auditing Knowledge Base that is contained on DCAA's Intranet, prior to the initiation of this audit. In addition in some instances, the assistance of IT specialists may be required to adequately evaluate the automated aspects of the internal controls. In these cases, auditors should contact their regional offices to obtain the necessary expertise.
The internal control matrix shows the interrelationships among the control objectives, control activities, and audit procedures used in this audit program. The control objectives and the audit procedures have been fully integrated into this audit program; therefore, the matrix is not needed unless it is desirable to see the associated control activities and the interrelationships in a matrix format.

B-1	Preliminary Steps	WP Reference
Version 5.14, dated April 2003		
1. Research and Planning		
a.	Become familiar with applicable sections of CAM 5-700 and any recent Headquarters guidance not incorporated in the CAM.	
b.	Evaluate the extent and results of the contractor's self-governance activities, internal and external audits, coordinated audits, etc., related to the MMAS. In those cases where internal or external audits have been performed, the auditor should follow the guidance contained in CAM 4-1000, Relying Upon the Work of Others. Document your evaluation.	

Master Document – Audit Program

c. Check the permanent file for:				
(1) Existence of contractor MMAS policies and procedures.				
(2) Organization charts depicting the functional areas responsible for the processing of MMAS data.				
(3) Material charging and distribution system flowcharts providing a pictorial overview of all manual and computerized processing steps.				
(4) Information systems documentation:				
(a) Pertinent record layouts of files created and/or used during the processing of material related transactions.				
(b) Database table definitions.				
(c) Source documents.				
(d) Information on the conversion of documents to computer media.				
(e) Subsidiary or master files affected by the system.				
(f) Relevant reports, journals, and ledgers produced in the flow of information to the MMAS reports.				
(5) Employee awareness training programs.				
(6) Listings of current government contracts.				
(7) Previous system audits performed. Check if the system is applicable, and if applicable, determine if it is relevant to the current system audit:				
	System	Applicable?	Relevant?	
	Accounting			
	Billing			
	Budget (Planning)			
	Compensation			
	IT			
	Estimating			
	Indirect/ODC			
	Labor			
	Material			
	Purchasing			
(8) Audit lead sheets.				
(9) The analysis of the control environment and the results of any other audits, for internal control weaknesses that may impact				

Master Document – Audit Program

this examination.	
d. Discuss the planned examination of the MMAS internal controls with the administrative contracting officer and, if appropriate, other customers to identify, understand, and document any concerns they may have or areas which should be evaluated.	
e. In planning and performing the examination, consider the fraud risk indicators specific to the audit. The principal sources for the applicable fraud risk indicators are:	
<ul style="list-style-type: none"> Handbook on Fraud Indicators for Contract Auditors, Sections II.2 and III (IGDH 7600.3, APO March 31, 1993) located at www.dodig.osd.mil/PUBS/index.html, and 	
<ul style="list-style-type: none"> CAM 6-305 and CAM Figure 4-7-3. 	
Document in working paper B any identified fraud risk indicators and your response/actions to the identified risks (either individually, or in combination). This should be done at the planning stage of the audit as well as during the audit if risk indicators are disclosed. If no risk indicators are identified, document this in working paper B.	
2. Entrance Conference and Preparation	
a. Prepare a written memorandum to the contractor to arrange for an entrance conference, covering the areas highlighted in CAM 4-302 and any specific data or pertinent information not yet provided.	
b. Conduct an entrance conference as outlined in CAM 4-302, with particular emphasis on:	
(1) Any changes in the material processing job stream since the last examination.	
(2) The contractor's monitoring process to ensure that established manual and computerized controls are functioning as intended.	
(3) Any identified weaknesses which may have been reported and related follow-up actions taken.	
3. Other Preliminary Steps	
a. Determine the material requirement, acquisition, and usage process employed by the contractor and to what degree a computerized system is used.	

Master Document – Audit Program

b. Perform a high level cursory assessment to determine if the following exist:	
(1) A functional organization with defined organizational responsibilities.	
(2) A written description of the work flow in the material process.	
(3) Policies and procedures for effectively controlling the process.	
4. Initial Risk Assessment	
Using the information obtained in steps 1, 2, and 3, prepare an initial risk assessment to determine the scope of the audit (W/P B).	

C-1	Control Environment	WP Reference
Version 5.14, dated April 2003		
The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure. The auditor should obtain a sufficient understanding of the control environment to determine the impact that it may have on the overall effectiveness of the MMAS internal controls.		
1. Obtain a copy of the most recently completed ICAPS for the Control Environment and Overall Accounting controls. Consider the rationale behind any moderate or high-risk assessment ratings and determine the impact, if any, on the effectiveness of the MMAS internal controls.		
2. If an examination of the control environment has not been recently performed, discuss all documented prior audit experience with the contractor, including permanent files, relevant audit reports and workpapers, suspected irregular conduct (SIC) referrals and discussions with prior auditors. Obtain an understanding of the following factors:		
<ul style="list-style-type: none"> • Integrity and ethical values. 		
<ul style="list-style-type: none"> • Commitment to competence. 		
<ul style="list-style-type: none"> • Board of directors and/or audit committee participation. 		
<ul style="list-style-type: none"> • Management's philosophy and operating style. 		
<ul style="list-style-type: none"> • Organizational structure. 		

Master Document – Audit Program

• Assignment of authority and responsibility.	
• Human resource policies and procedures.	
3. Document the overall assessment of the control environment and the impact that it has on the examination of the MMAS.	

D-1	Contractor's Risk Assessment	WP Reference
Version 5.14, dated April 2003		
The auditor should develop a sufficient understanding of the risk assessment process currently employed by the contractor in terms of its identification, analysis, and management of risks relevant to the preparation of contract cost data.		
1. Meet with responsible personnel to obtain an overview of the various risk factors considered by management.		
2. Once the various risk factors are identified, obtain an understanding of how management identifies the risks, estimates the significance of risks, assesses the likelihood of their occurrence, and relates them to contract reporting.		
3. If applicable, obtain an overview of any plans, programs, or actions management may initiate to address specific risks. Keep in mind that, depending on the nature of specific risks, management may elect to accept a given risk due to costs or other considerations.		
4. Document your overall understanding of the contractor's risk assessment practices.		

E-1	Information and Communications	WP Reference
Version 5.14, dated April 2003		
Information and communication processes consist of the methods and records established to record, process, summarize, and report contract cost data. The auditor should develop a sufficient understanding of the contractor's information and communication processes (relevant to contract cost data) to identify significant classes of transactions and how they are initiated, processed, controlled, and reported.		
1. Since the accounting and IT systems are integral components of information and communication processes, obtain a copy of the most recently completed Internal Control Audit Planning Summaries for the Environment and Overall Accounting Controls and the IT System		

Master Document – Audit Program

General Internal Controls. Evaluate the rationale behind any moderate or high-risk assessment ratings and determine the potential impact, if any, on the effectiveness of the MMAS internal controls. Document your evaluation.	
2. Evaluate relevant permanent files, prior audit working papers, and any prior contractor demonstrations of its MMAS information and communication processes. Document your evaluation.	
3. Determine if the contractor has made changes to the information and communication processes in its MMAS since the last examination. Evaluate the changes.	
4. The contractor should include appropriate manual and computerized controls in its information processing that check for accuracy, completeness, and proper authorization of material related transactions.	
a. Have the contractor identify all access controls to the MMAS applications and related transactions.	
(1) Compare the contractor disclosed controls with the generic access control listing contained in CAM 5-1406.1 and identify any controls not incorporated in the application.	
(2) Verify the existence and adequacy of the contractor disclosed controls. Discuss any apparent deficiencies with the contractor.	
b. Have the contractor identify all data input controls to the MMAS applications and related transactions for originating, authorizing, collecting, preparing, and approving input transactions.	
(1) Compare the contractor disclosed controls with the generic input control listing contained in CAM 5-1406.2, and identify any controls not incorporated in the application.	
(2) Verify the existence and adequacy of the contractor disclosed input controls. Discuss any apparent deficiencies with the contractor.	
c. Have the contractor identify all processing controls for the MMAS, which ensure all authorized transactions, are processed accurately and properly.	
(1) Compare the contractor disclosed controls with the generic processing control listing contained in CAM 5-1406.3 and identify any controls not incorporated in the application.	
(2) Verify the existence and adequacy of the contractor disclosed processing controls. Discuss any apparent deficiencies with the contractor.	

Master Document – Audit Program

d. Have the contractor identify controls related to the identification, correction, and resubmission of rejected data.	
(1) Compare the contractor disclosed controls with the generic error detection and correction control listing contained in CAM 5-1406.4 and identify any controls not incorporated in the application.	
(2) Verify the existence and adequacy of the contractor disclosed error detection and correction controls. Discuss any apparent deficiencies with the contractor.	
e. Have the contractor identify controls related to ensuring the output accuracy of computer program-processing.	
(1) Compare the contractor disclosed controls with the generic output control listing contained in CAM 5-1406.5 and identify any controls not incorporated in the application.	
(2) Verify the existence and adequacy of the contractor disclosed output controls. Discuss any apparent deficiencies with the contractor.	
5. Selectively trace material transactions through the MMAS to validate your understanding of the information and communication processes in the MMAS. Any discrepancies between your understanding and the controls identified should be noted and resolved prior to completing the remainder of this examination.	
6. Document your confirmed understanding of the MMAS information and communication processes and obtain a written confirmation from the contractor indicating that they agree with this understanding. This documentation will typically take the form of system flowcharts or narrative descriptions and can be prepared by the auditor or consist of documentation prepared by the contractor (see CAM 5-106).	

F-1	Monitoring	WP Reference
Version 5.14, dated April 2003		
Monitoring is a process that assesses the quality of internal control performance over time. It involves assessing the design and operation of controls on a timely basis and taking necessary corrective actions. The auditor should develop a sufficient understanding of the contractor's ongoing monitoring activities and/or separate evaluations related to the MMAS internal controls.		
1. Determine if ongoing monitoring procedures are incorporated into the normal recurring activities of the contractor's organization. These		

Master Document – Audit Program

procedures should include regular management and supervisory activities.	
2. Where applicable, determine the extent of internal audit involvement in performing monitoring functions through separate evaluations.	
3. Determine and document the extent of monitoring activities being performed by external parties.	
4. Document your overall understanding of the monitoring activity being performed at the contractor's location and determine the impact it will have on our examination of the MMAS.	

G-1	System Description	WP Reference
Version 5.14, dated April 2003		
	The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.	
	The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.	
	The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
	In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
	MMAS standard 1 requires the contractor to provide an adequate system description including policies, procedures, and operating instructions compliant with FAR/CAS criteria as interpreted by this guidance for all elements of affected cost.	

Master Document – Audit Program

1. Obtain the contractor's self-assessment of its system description; including written policies, procedures, and operating instructions for its MMAS(s). Document deficiencies found by the contractor and the corrective actions taken/anticipated.	
2. Document, in a written brief, your evaluation of the system description including policies, procedures, and operating instructions including:	
a. Whether they provide sufficient information to allow one to obtain a thorough understanding of the way the system is intended to operate.	
b. Potential noncompliances with the standards and your evaluation of the contractor's initial response to these potential noncompliances.	
c. Your conclusions on the adequacy of the contractor's policies and procedures, system descriptions, and action plan(s) for keeping them current.	
3. When the system description is considered adequate, determine and document any additional audit steps necessary to express an audit opinion (see CAM 4-1000 - Relying Upon the Work of Others).	

H-1	Material Requirements	WP Reference
Version 5.14, dated April 2003		
	The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.	
	The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.	
	The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
	In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control	

Master Document – Audit Program

(control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
MMAS standard 2 requires that the costs of purchased and fabricated material charged or allocated to a contract are based on valid time phased requirements as impacted by minimum/economic order quantity restrictions. The primary objective is to ensure sufficient controls are established and being used to assure material costs are valid and time phased. Accurate bills of material (BOM) and master production schedules (MPS) should assure that the contractor's material costs are both valid (a valid requirement for the material) and reasonably time phased (billed within a reasonable time of the actual need date).	
1. BOM Accuracy	
<p>a. Document your evaluation and conclusions related to the contractor's method of determining and maintaining the accuracy of its BOM system. Identify the specific procedures for determining material requirements and how the procedures and related internal controls ensure that materials ordered and billed to contracts are valid.</p> <p>Coordinate closely with the Government technical representative and document who will perform individual steps.</p>	
b. Evaluate the contractor's selection of appropriate production contract(s) for detailed analysis that procedures are being followed and are working.	
c. Evaluate the contractor's calculation of accuracy of selected contract BOM(s) and document whether the contractor meets the goal of 98% accuracy.	
d. Determine whether the contractor's evaluation of the individual processes of developing and revising BOMs provides adequate internal controls and reasonable assurances that billed materials are needed to fulfill contract requirements and that all required materials have been accurately identified.	
e. Evaluate the contractor's reasons for any errors found in its BOMs which the contractor considers excludable in the measurement of accuracy and/or does not result in harm to the system of controls or to the Government.	
f. Evaluate the contractor's identification of those conditions	

Master Document – Audit Program

considered deficient and resulting in increased costs to the Government, and its calculation of the cost impact.	
g. Determine that appropriate adjustments were made to ensure billings are properly adjusted to exclude invalid requirements.	
2. MPS Accuracy	
<p>a. Document your evaluation and conclusions related to the contractor's method of determining and maintaining the accuracy of its MPS system. Determine that the method used by the contractor ensures that materials will not be received and charged/billed to contracts earlier than is reasonably justified.</p> <p>Coordinate closely with the Government technical representative and document who will perform individual steps.</p>	
b. Determine the adequacy of the contractor's self-assessment of the procedures and internal controls governing the establishment and revision of available capacity and manufacturing lead and process times.	
c. Determine whether the contractor's scheduling (or related) procedures ensure development of a required material delivery date as close to the manufacturing/assembly need date as possible given the contractor's internal and external market forces.	
d. Analyze the contractor's assessment of information used in the scheduling process compared to what is really being incurred in the departments/shops in the following areas:	
(1) Availability of actual capacity.	
(2) Manufacturing/assembly process times including individual processes, queue times, kitting/staging, etc.	
(3) Dock to stock which would include time for receiving, inspection, testing, handling, etc.	
(4) Time in inventory. Analyze the contractor's methodology and justification for the period of time between the placement of materials in stores (a holding area) and its actual manufacturing/assembly need date.	
(5) Expand to other areas you deem necessary to ensure adequate time phasing.	
(6) Determine whether the contractor's analysis is sufficient to (i) ensure planned lead and process times are consistent with what is being experienced in the responsible department/shop and	

Master Document – Audit Program

(ii) provide assurances that material charges are reasonably time phased.	
e. Evaluate the contractor's justification for costs/billings based on minimum/economic order quantities or other conditions warranting early receipt of materials.	
f. Evaluate the reasonableness of the contractor's analysis of controls over acceptance of early deliveries of materials from vendors.	
(1) Evaluate the contractor's selection and analysis of parts for comparing planned receipt dates (due dates which are based on scheduled lead times) to actual receipt dates and identify patterns of "early receipt and billing."	
(2) Evaluate the contractor's justification for early delivery/receipt.	
g. Evaluate the contractor's calculation of MPS accuracy and document whether the contractor meets the goal of 95% accuracy.	
h. Evaluate the contractor's identification of those conditions considered deficient and resulting in increased costs to the Government, and its calculation of the cost impact.	
i. Determine that appropriate adjustments were made to ensure billings are properly adjusted to exclude unreasonably time-phased materials.	
3. Justification for Exceptions	
a. Evaluate the contractor's policies and procedures to determine if they require the identification, investigation, and appropriate corrective action for materials purchased and charged to contracts in excess of valid time-phased requirements.	
b. Selectively evaluate materials purchased and charged to government contracts in excess of valid time-phased requirements to determine if they are reasonable or that appropriate adjustments are made to contract billings. The following steps may provide indications of such charges:	
(1) Document your evaluation and conclusions related to the contractor's analysis of the internal controls and procedures of the netting process; also, identify materials/parts for which no requirements exist or for which quantities differ from identified requirements.	
(2) Document your evaluation and conclusions related to the contractor's analysis of inventory status data that identified parts having significant positive and negative status that may	

Master Document – Audit Program

	indicate invalid requirements or unreasonably time phased materials and problems in the system for determining requirements.	
	(3) Evaluate (i) the methodologies used to charge material/parts to contracts (it may differ by class of material), (ii) the cost basis for the charges, and (iii) the level(s) at which material/part charges are identified/recorded to gain an understanding as to how requirements are charged to contracts. Identify the data files that contain the material/part charges to the contract to identify potential problems relative to reconciliation between contract costs and requirements.	
	(4) Document your evaluation and conclusions related to the contractor's analysis of parts that determine if there appears to be an unusually long period between the time materials were received and the time they were used in the production process (months on hand). Document your agreement/ disagreement with the contractor's reasons for materials sitting in inventory for long periods of time, including the basis of your decision.	
	(5) Document your evaluation and conclusions related to the contractor's analysis of inventory turnover.	
	(6) Document your conclusions relative to the contractor's follow-up and treatment of apparent deficiencies found during the above steps.	
	c. If the contractor identified deficiencies in its internal controls resulting in a noncompliance with the standard, evaluate the contractor's determination of the potential harm to the Government and its analysis to determine the cause of the deficiencies.	

I-1	System Monitoring	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if		

Master Document – Audit Program

reliance can be placed on such evaluations.	
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
MMAS standard 3 requires that the contractor's system provide a mechanism to identify, report, and resolve system control weaknesses and manual overrides. As with standards 1 and 4 the requirements of this standard are an integral part of the evaluation of all standards.	
1. Determine the sufficiency of the contractor's analysis of MMAS related exception reports and reports that track manufacturing process performance pertaining to the contractor's material systems.	
2. Evaluate the contractor's review of policies, procedures, and operating instructions.	
3. Evaluate how the contractor selected significant reports and determined that exceptions are adequately identified, reported, and resolved consistent with procedures (testing of the system).	
4. Evaluate the analysis regarding the adequacy of the system to timely identify exceptions such as excess and residual materials, no cost transfers, lost/found parts, etc.	
a. The analysis should include a determination regarding the reasonableness of the point when excess and/or residual material is made available for transfer (e.g., product delivery, shop order completion, testing completion, etc.).	
b. The contractor's system should provide for identification and the proper disposition of lost and found parts. Evaluate the contractor's analysis to determine how lost and found parts are recorded and reentered into the system.	
5. Where the contractor's analysis identified reports (systems) with a significant number of exceptions, evaluate the contractor's conclusions or corrective action plans.	
6. Evaluate the analysis regarding who has access to and authority to enter data into the system, resolve exceptions, and manually override	

Master Document – Audit Program

the system logic. (See Step 8 below.)	
7. Determine whether the analysis evaluated whether edit check controls within the system include checks to preclude entry of erroneous data. (See Step 8 below.)	
8. Evaluate whether the analysis determined that there are sufficient controls in place that are being used to prevent the ordering and billing of parts over and above contract requirements without sufficient justification.	
9. Determine whether the analysis evaluated for sufficient controls to identify and follow up on costs incurred on spares contracts after parts are delivered.	
10. Evaluate how the contractor evaluated for the possibility of major areas of risk that are not subject to either exception reporting or edit checks.	
11. Evaluate the reasonableness of the contractor's identification of those conditions considered deficient and result in increased costs to the Government, and its calculation of the cost impact.	
12. Determine that appropriate adjustments were made to ensure billings are properly adjusted to account for identified deficiencies causing overbillings.	
13. When the policies, procedures and operating instruction for sytem monitoring are adequate, document any additional audit steps necessary to express an audit opinion (see CAM 41000 - Relying Upon the Work of Others).	

J-1	Audit Trails	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.		

Master Document – Audit Program

The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
MMAS standard 4 requires the contractor to provide audit trails and maintain records necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.	
1. For each of the 10 standards determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions of the system(s) under examination.	
2. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired.	

K-1	Physical Inventories	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.		
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.		
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while		

Master Document – Audit Program

obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
MMAS standard #5 provides that a 95 percent inventory record accuracy is desirable in order to assure that recorded inventory quantities reconcile to the physical inventory.	
1. Evaluate the contractor's policies and procedures for the receipt and inspection of material to determine if they are adequate to ensure the following:	
a. All material received is accounted for.	
b. Only material meeting agreed to quantity and quality specifications are accepted.	
c. Material returns are properly controlled and accounted for.	
d. All material received is transferred to inventory or otherwise accounted for.	
2. Physically observe the contractor's actual material receipt and storage practices to ensure that they are consistent with established policies and procedures.	
3. Evaluate the contractor's policies and procedures for issuing material to the floor to determine if they are adequate to ensure that all issued and returned material is accounted for.	
4. Physically observe the contractor's actual material issuance practices to determine if they are consistent with established policies and procedures.	
5. Evaluate the contractor's procedures and internal controls for verifying the quantities of physical inventories. Physical inventories include company owned stock/asset inventory plus contract project inventory. Procedures and internal controls include reconciling the quantities recorded in the perpetual MMAS inventory books and records to physical count of parts stored in warehouses or other inventory locations. Coordinate this portion of your audit closely with the government property specialists as many of the normal reviews performed by them may satisfy required oversight	
6. Evaluate the contractor's procedures for validating the overall inventory recorded in the MMAS perpetual inventory books of record, i.e., the value of inventory maintained in the MMAS inventory books of record as represented by quantity multiplied by unit prices. Reconcile inventory recorded in perpetual MMAS inventory books of	

Master Document – Audit Program

record to amounts recorded/charged in applicable cost or other appropriate controlling account ledger(s).	
7. Evaluate the contractor's identification of material classification whereby count tolerances are determined by the criticality or materiality of the materials.	
8. Evaluate the contractor's review and justification for established tolerances.	
9. Evaluate the contractor's method of determining inventory record accuracy.	
10. Determine the reasonableness of the contractor's cycle (periodic ongoing) counts of inventory with emphasis on:	
a. Recent results of cycle counts	
b. Cycle count procedures	
c. The basis for count intervals	
11. Evaluate the contractor's adjustments for differences between book inventory and physical count to ascertain that the contractor has effective internal controls for controlling losses and overages.	
12. Determine the appropriateness of how the contractor handled the effects of physical losses/ overages when they occurred, including the contractor's basis for determining whether or not the errors resulted in harm to the Government.	
13. Evaluate the contractor's methodology for costing adjustments to booked inventory. Determine whether the method is consistent, equitable, and unbiased.	
14. Evaluate the contractor's calculation of inventory record accuracy.	
15. Evaluate the contractor's identification of those conditions considered deficient and resulting in increased costs to the Government, and its calculation of the cost impact.	
16. Determine that appropriate adjustments were made to ensure billings are properly adjusted to account for identified deficiencies causing overbillings.	
17. When the policies, procedures and operating instructions for inventory record accuracy are adequate, determine and document any additional audit steps necessary to express an audit opinion (see CAM 4-1000 - Relying Upon the Work of Others).	

Master Document – Audit Program

L-1	Material Transfers	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.		
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.		
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.		
The contractor's policies and procedures should provide detailed descriptions of circumstances which, will result in manual or system generated transfers of parts. Determine whether the contractor adequately describes circumstances which, will result in manual or system generated transfers of parts.		

M-1	Material Costing	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control		

Master Document – Audit Program

objective, are also included in the attachment.	
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.	
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
The contractor should maintain a consistent, equitable, and unbiased logic for costing material transactions.	
1. Evaluate the assessment of the contractor's procedures and controls for initial charging of material to ensure the charges are consistent, equitable, and unbiased and compliant with CAS 411. NOTE: If a CAS 411 compliance audit has been recently performed, the auditor should incorporate the results into this audit and no further effort should be required.	
2. Evaluate the contractor's policies and procedures to determine if they clearly identify the costing policies for sensitive material transactions.	
3. Selectively evaluate sensitive material transactions to determine if they were costed in accordance with established policies and procedures. Several computer software packages are available to assist in this task. These include MS-Excel, MS-Access, DATATRAK, SAS, etc.. Contact your Regional IT representative (RSA) if assistance in this area is necessary	
4. Cost transfers	
a. Evaluate the assessment of the company description of the material transfer system and the procedures and internal controls governing transfers.	
b. Evaluate the contractor's analysis of its detailed transfer listings. Evaluate a sample (sufficient evidence) of transfers in order to determine the cause and reasonableness of the transfers. Evaluate	

Master Document – Audit Program

the rationale for continuing high levels of transfers or plans to correct identified deficiencies.	
c. Evaluate the assessment of the contractor's transfer costing methodology.	
(1) Determine whether sufficient tests were performed to determine if and when costs are transferred with the physical movement of parts.	
(2) Determine whether sufficient tests were performed to ensure the contractor transfers all costs associated with the parts. For example, fabricated parts should be transferred at a value which includes material, labor, and related indirect costs.	
(3) Determine whether sufficient tests were performed to ensure the contractor's practices are consistent with its stated costing methodology for initial charges and transfer charges to contracts.	
(4) Determine whether sufficient tests were performed to ensure costs are transferred at standard or actual costs using one of the CAS 411.50(b) inventory valuation methods.	
(5) If costs are not always transferred at the same time as the part, determine the reasonableness of the contractor's analysis of controls that are in place to ensure the costs are transferred within the same billing cycle or within a reasonable time thereafter.	
(6) Determine whether sufficient tests were performed to ensure cost transfers are consistent, equitable, and unbiased.	
d. In order to consider audit leads of possible internal control weaknesses, evaluate the contractor's sample (sufficient evidence) of transfer activity used to analyze trends.	
5. Loan/Paybacks	
a. Evaluate the analysis of circumstances that result in a loan/payback, including its basis for determining the reasonableness and equitableness of these transactions.	
b. Evaluate the analysis of the loan/payback aging report to determine whether the system identifies the borrowing contract and the date the parts were borrowed.	
c. Evaluate the tests that provide sufficient evidence that loans do not remain outstanding for unreasonable periods of time.	

Master Document – Audit Program

d. Evaluate the tests that provide sufficient evidence that procedures and controls are in place to correct any overbillings due to loan/payback.	
e. Evaluate the tests that provide sufficient evidence that the costs of the replacement parts are charged to the borrowing contract.	
6. Evaluate the identification of those conditions considered deficient and resulting in increased costs to the Government, and its calculation of the cost impact.	
7. Evaluate the determination that appropriate adjustments were made to ensure billings are properly adjusted to account for identified deficiencies causing overbillings.	
8. When the policies, procedures and operating instructions for inventory record accuracy are adequate, determine and document any additional audit step necessary to express an audit opinion (see CAM 4-1000 - Relying Upon the Work of Others).	

N-1	Inventory Allocations	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.		
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.		
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain		

Master Document – Audit Program

a sufficient understanding of the contractor's control activities.	
MMAS standard #8 requires that the contractor's system handle allocations of common inventory in such a manner as to preclude improper allocation and costing of allocations.	
1. Evaluate the contractor's submission to determine the magnitude of contractor cost allocations from common inventories. If allocations are immaterial, further effort may not be required.	
2. Evaluate the contractor's analysis of its procedures and internal controls governing the allocation process.	
3. Evaluate the contractor's definition(s) and determine that the classifications are appropriate for the types of materials costed as common inventory. Evaluate the contractor's analysis of different classes of materials comprising the common inventory costs that are allocated to contracts. Determine that common materials that have been allocated benefit the contracts charged.	
4. Determine whether the contractor's analysis provides sufficient evidence that allocation methods are compliant with valid time phased requirements. Allocations should not result in allocations of material costs for which there are no contract requirements or are too far in advance of required production dates without sufficient justification, e.g., availability of quantity discounts, economic order quantities, known or expected vendor problems, etc.	
5. Assess the contractor's analysis of the common inventory being allocated to determine that the pool of common inventory allocated is accurate (refer to MMAS Standard 5).	
6. Evaluate the contractor's analysis of the frequency of the billing cycle, and evaluate tests that assure billings show common inventory costs were properly calculated (computerized or manually) and costed on a current basis.	
7. Where common inventory is reallocated on a periodic basis, evaluate the contractor's analysis performed to determine the reasonableness of the basis and method for reallocation. Evaluate the contractor's evidence that shows the total adjustments (debits/credits) of reallocations are accurately reflected in billings.	
8. Evaluate the contractor's identification of those conditions considered deficient. Determine that any adverse cost impact is calculated and that adjustments are made to ensure billings are made to account for identified deficiencies.	
9. When the policies, procedures and operating instructions for inventory allocations are adequate, determine and document any additional audit steps necessary to express an audit opinion (see CAM 4-1000 -	

Master Document – Audit Program

Relying Upon the Work of Others).	
-----------------------------------	--

O-1	COMMINGLED INVENTORY	WP Reference
Version 5.14, dated April 2003		
The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.		
The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.		
The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.		
In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.		
Where a contractor has commingled inventory MMAS standard #9 requires adequate controls to ensure material charges or allocations do not compromise the first eight standards.		
1. Evaluate the contractor's analysis of the procedures and internal controls related to commingled inventory		
2. Determine whether the contractor's internal controls over charging and/or allocation of commingled inventory are sufficient to ensure the requirements of standards 1 through 8 are met for this portion of the contractor's material inventory.		
3. When the system description is considered adequate, determine and document any additional audit steps necessary to express an audit opinion (see CAM 4-1000 - Relying Upon the Work of Others).		

Master Document – Audit Program

P-1	Internal Audits	WP Reference
	Version 5.14, dated April 2003	
	The auditor should obtain an understanding of the contractor's control activities (policies and procedures) for each relevant MMAS control objective. A detailed understanding of control activities is essential to the assessment of control risk for each objective. MMAS primary control objectives and examples of control activities, as they relate to U.S. Government contracts, are provided in the Internal Control Matrix (ICM-MMAS). The audit procedures in this section, organized by control objective, are also included in the attachment.	
	The auditor should evaluate contractor internal and/or external audits to determine if any control activities have already been evaluated and if reliance can be placed on such evaluations.	
	The auditor should recognize those aspects of the contractor's MMAS that are automated and should ensure that the related control activities adequately address this automation by performing the audit procedures in Section E above as well as those set forth below.	
	In performing the following audit procedures to understand the contractor's control activities, the auditor should recognize that while obtaining an understanding of the other components of internal control (control environment, contractor risk assessment, information and communications, and monitoring), he/she is also likely to have obtained some level of knowledge about control activities. The auditor should utilize this knowledge in determining the additional time needed to obtain a sufficient understanding of the contractor's control activities.	
	MMAS standard #10 requires that the system be subjected to periodic internal audits to ensure compliance with established policies and procedures.	
	1. Evaluate contractor provided data for demonstrating that the MMAS is subject to periodic internal audits	
	2. Evaluate the contractor's internal audit plan and schedule of completed audits.	
	3. Consider audits performed by functional units that meet the objective of standard #10.	
	4. If the contractor contends that such reviews have been performed, but is unwilling to make them available to DCAA in any form, the auditor <u>may</u> be unable to determine if the contractor has complied with the standard. The auditor must be satisfied that the system is subjected to	

Master Document – Audit Program

periodic internal audit.	
5. Document the basis of your conclusion that the system is subjected to periodic internal audit.	
6. When the contractor's policies, procedures and operating instructions for internal audits are adequate, determine and document any additional audit steps necessary to express an audit opinion (see CAM 4-1000 - Relying Upon the Work of Others).	

A-1	Concluding Steps	WP Reference
Version 5.14, dated April 2003		
1. Assessment Of Control Risk		
a.	Considering all five components of internal control, assess control risk for each of the relevant control objectives. For each of the objectives, summarize the characteristics, which support the assessed level of control risk and specifically identify any internal control weaknesses or system deficiencies.	
b.	Determine if the system is adequate to reasonably assure proper pricing, administration, and settlement of Government contracts in accordance with applicable laws and regulations.	
c.	Based on the assessments above, determine the impact on the scope of other audits.	
d.	Update the Internal Control Audit Planning Summary (see CAM 3-305)	
e.	Coordinate the results of audit with the supervisor. The supervisor and the FAO manager should review and initial the ICAPS before the exit conference is performed. If it is determined that additional audit steps are needed, any additional planned audit effort should be accomplished as part of this examination or immediately thereafter. Any delays in completion of this audit effort should be documented and approved by management.	
2. Summary Steps		
a.	Prepare an overall audit summary, which describes in sufficient detail the audit results/findings. Quantify the estimated cost impact (the effect of the deficiency) to the Government, normally a	

Master Document – Audit Program

percentage withhold to be applied to contract billings. If you are unable to quantify the impact of the deficiency explain in the working paper summary and refer to FAR 32.503-6.	
<p>b. Discuss the findings and recommendations with the contracting officer to ensure he/she understands the findings, is aware of the underlying evidential data, and determine steps that will need to be taken by the Government--especially in terms of a recommended withhold.</p> <p>(1) --The ACO should be invited to the exit conference.</p>	
c. Prepare a draft audit report in accordance with CAM 10-400.	
d. Conduct an exit conference with the contractor in accordance with CAM 4-304.	
e. Finalize the audit report incorporating the contractor's response and audit rejoinder.	
f. If the contractor has EVMS covered contracts, provide comments in the audit report on whether any findings are likely to impact the contractor's EVMS (10-1204.5b). Discuss findings and recommendations relating to the EVMS with the Contract Administration Office EVMS Monitor prior to issuance of the report. Immediately evaluate the impact of these findings on specific EVMS covered contracts and provide the details in flash EVMS surveillance reports (11-209.2.e).	
g. Update the permanent file in accordance with CAM 4-405.1.b (MAAR #3).	
3. Closing Actions	
Closing actions should be performed in accordance with FAO procedures. These procedures may require either auditors or administrative personnel to perform various closing steps. Completion of these closing actions should be documented (e.g., by initials and date on the CD or working paper folder, etc.) and should include:	
a. Once an audit report is signed, the electronic document should immediately be modified to indicate who signed it, and it should be password protected. The electronic file should then be renamed according to the convention "01 DCAA Report [RORG_ASSIGNMENT NO.] – Final.doc" and changed to a read-only file. Only this file should be stored, transmitted, or otherwise used for official purposes.	
b. Once the report is signed, the signature page of the audit report	

Master Document – Audit Program

must be scanned in accordance with Agency standard scanning instructions. For audit packages, the scanned signature page file should be named the same as the audit report (see above) with “-sig” added (i.e., 01 DCAA Report 01101-2002X10100389-Final-sig.tif). There is no requirement to make the file a part of the APPS generated executable file and it may be included separately on the CD containing the APPS generated executable file.	
c. Ensure an electronic copy of the final draft audit report containing the supervisory auditor’s initials and date on the top page, cross-referenced to the working papers, is included in the working paper package. The final draft report should include all substantive changes made to the original draft, with cross-referencing updated as necessary. It should differ from the final report only due to minor administrative changes (spelling, format, etc.) made during final processing.	
d. Include an electronic version of the acknowledgement letter in the audit working paper package.	
e. Ensure all working paper files are "read only" and, if necessary, compressed for final storage. Generally, current Agency software should be used to automatically modify all electronic files for storage.	
f. Two complete sets of electronic working papers must be prepared. The "original" set should be stored in the working paper package. The "archive" set is to be stored separately from the working paper package on a single session CD-ROM. If there will be a short-term need to access the working papers, a third, or "working" set should be stored so as to be available for reference, generally on the LAN. This set should be deleted when no longer needed.	
g. Verify that electronic files stored on removable media are not corrupted and can be unarchived.	
h. Securely enclose the “original” set of electronic files in the working paper package.	